

Compulsory day release urged

by Peter David

A big expansion of higher education, based on the introduction of compulsory day release until postgraduate level, has been called for by the National Association of Teachers in Further and Higher Education.

In a response this week to the Government's discussion document on higher education in the 1990s, the 60,000-member association says that a wide range of social groups are still denied access to higher education.

"If the widening of opportunities for these students is to become more than a pious aspiration, positive steps will need to be taken by both the educational world and by government. For education, the nature of provision will need to be transformed to meet the new demands placed upon higher education. Courses and course patterns, curricular, administrative and financial arrangements will require revision."

NATFHE believes that among the essential measures that an extension of opportunity would require, are a phased introduction of compulsory day release and paid educational leave. Students on non-advanced courses ought also to be eligible for automatic grants and the existing "unrealistic and inequitable" fees system ought to be abolished.

In its response the association criticises the Government discussion paper for focusing exclusively on the demographic problem and ignoring the needs and potential of individuals and the requirements of the country for skilled manpower.

"The logistics of matching the higher education system so closely to the demographic trend is proposed in models A, B and C have already been experienced by teachers in higher education—particularly in teacher education and in

polytechnics—and have been found to be damaging to students and staff alike," it says.

"The overdependence on temporary part-time staff, the use of 'cox and box' methods and rental or temporary accommodation underlying the proposals are a recipe for educational disaster."

Commenting on the DES model D, the proposals for shortened courses, particularly study deferred entry during the bulge years, the NATFHE document says that there is a place for these alternatives "but not as a short-term substitute for existing three or four year patterns". In any case, the association notes, there is growing pressure in some disciplines for longer rather than shorter courses.

A widely drawn model E comes closest to the association's view of the future as long as the idea that Robbins restricted higher education to students with two A levels is abandoned.

Writ sought in Sheffield finals row

by John O'Leary

A former students' union president is taking Sheffield University to the High Court over a decision which prevents him sitting his final examinations for the third time. Mr Pat Hughes is applying for a writ to quash a ruling by the senate excluding him from the university.

Mr Hughes has already been given leave by the High Court to apply to the Divisional Court for a judicial review.

The recommendation that he be excluded came from the faculty of social sciences, following Mr Hughes' second failure in his economics finals. It has prevented him sitting again this year, as he had planned. But he intends taking his finals again in 1979 if his action is successful.

Mr Hughes, who was president of the students' union in 1974-75, is claiming that his exclusion constituted a breach of natural justice since he was not invited to appear before the meeting of senate which took the decision. He says his first performance in finals, in 1976, was only described as a "bad failure" a year later.

The university registrar, Mr Alex Currie, said there was no question of Mr Hughes being victimised. The prescribed procedures had been followed and he had twice been interviewed by the faculty board in the presence of a solicitor.

He said Mr Hughes had been invited to appeal but, in the judgment of the university, had not pursued any new evidence. Mr Hughes could still pursue the matter with the university council through the grievance procedure.

Mr Hughes, who was admitted to the university in 1971, failed eight of the nine economics papers in 1976 and a series of meetings with student affairs committee in July 1977, following his second failure.

Exam board rebuff to N and F

A major rebuff for the proposed replacement of A-level examinations by the two-tier N and F system came from one of the leading examination boards.

Condemnation of the plan was contained in a 60-page report by the University of Cambridge Examinations Syndicate.

The report is bitterly opposed to the abolition of A levels but acknowledges there is a strong case for reviewing the whole pattern of 16 education. It suggests, as an interim measure, the retention of A levels combined with the introduction of a new N level examination.

"Putting the question in simplest terms, the choice seems to lie between a complete abolition of the existing examination system, and a system which will have to be made sooner or later. Whether this is the right time to make it is open to debate."

"To replace A level at this time by something so ill-defined and untested as the N level, is positively inviting a lowering of standards. The syllabus is, therefore, opposed to the abolition of A level until the system of education after the age of 16 has been reviewed and some form of stable pattern has emerged."

"The Syndicate does not, however, wish to defend the status quo. It welcomes the introduction of a new examination on the lines of N level which could be taken either as a level or as an examination in its own right."



Peter Knight, a lecturer in the School of Mathematical Sciences at Plymouth Polytechnic, was elected as president of the National Association of Teachers in Further and Higher Education last week. Conference reports, page 2.

Unions spar on university representation

by John O'Leary

Talks aimed at producing an inter-union agreement on the representation of the existing examination system will have to be made sooner or later. Whether this is the right time to make it is open to debate.

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LSE appointment has social work staff up in arms

by Peter David

The British Association of Social Workers is considering making an unprecedented complaint to the Secretary of State for Education and Science following the appointment of an "unqualified" academic to the first chair of social work at the London School of Economics.

Professor Robert Parker, head of sociology at Chelsea College, London, was appointed social work professor at the LSE last week. The 10,000-member BASW and staff of the school claim he has never practised or taught social work and is not professionally qualified.

Mr John Cypher, assistant general secretary of BASW, said the association would be complaining to the Education and Training in Social Work. An approach might also be made to Mrs Williams, the secretary of state, asking her to assume the same oversight of social work professions that the Social Services Secretary has of local authority social services directors.

Social work staff at the LSE have joined in the complaint. In a public statement they say that anyone appointed to a chair in social work should be a professionally qualified social worker.

"We therefore regret that the appointment of the first professor of social work at the LSE has breached this principle. We consider that the importance of holding the relevant professional qualification is not restricted to the educational task to be carried out within the university, as the appointment to a chair in social work involves a leadership position within social work generally."

The argument about Professor Parker follows a similar controversy about the recent appointment of Mr Gerard Rochford, a psychologist, to the chair of social work at Aberdeen University. The BASW wrote in moving to the vice-chancellor expressing "surprise and disappointment" and warning that the credibility of the university's social work department could not be maintained with a professor not qualified in social work.

Mrs Jane Thomas, chairman of BASW and a lecturer at the LSE, commented this week: "If chairs of social work are to be meaningful, they should be held by people who are qualified in the particular discipline. This is taken for granted in other

disciplines. But both Aberdeen and now the LSE have breached that principle. Many good social workers have turned academics. Most social workers are qualified social workers. There is the possibility that there may be a mismatch between the university's requirements for published research and the requirements of practice, but I believe there are many excellent academic social workers around who are capable of professing the subject at this level."

Professor Parker is widely known as the author of a standard book on social administration, *Social Theory and Social Policy*. Before moving to Chelsea he was sociology professor at Goldsmiths' College. An LSE spokesman said the school was "delighted" to have him on the staff.

A spokesman for the Central Council of Education and Training in Social Work said the council recommended that social work teachers should "normally" be qualified social workers, but no guidelines existed on the appointment of chairs. "It is the right of a university to make its own appointments," he added.

Inner city hopes spring external

by Robin McKie

A technique has been developed which will allow derelict ground in cities to be used for high-quality building purposes—by constructing houses on rubber springs. This novel vision has become fact at a number of building projects in London and much of the consultancy and advisory work involved has come from the city's Imperial College.

Professor Peter Grootenhuys, of the mechanical engineering department, said the development had far-reaching social implications for the quality of life in inner cities in the future.

Rubber blocks were first used in construction work at the development of the Barbican in London. The designers took advantage of rail line repositioning there to construct a new track on rubber blocks. They mounted the line on a massive concrete bridge which in turn is mounted on rubber blocks, absorbing the noise and vibration of passing trains. This allowed architects to build luxury flats, shops and even a concert hall over the line without trains disturbing residents.

The technique has now been applied to buildings and has been used in construction at several sites including London's Wellington hospital and the Alexandra Road housing scheme in Camden. The rubber blocks are incorporated in the buildings' foundations and absorb noise and vibration from rail lines near by.

Professor Grootenhuys said the technique now enabled builders to open up sites which were once unsuitable and frequently derelict, because of their proximity to rail lines. He estimated that this added between 2 and 3 per cent to building costs.

Luxury houses for sale

by Nguan Crequer

The University College of Wales, Aberystwyth, is to build 64 luxury houses on a sprawling 16-acre site which it owns. They will be sold to "selected" private buyers.

The college emphasizes that no public money is being used to finance the development, it is relying on endowment funds. Any profit will go back to the funds and will eventually be used to benefit the university. The University Grants Committee is not involved.

Its view is that although the scheme is unusual, it is not a rule to play, provided the Treasury exchange money is used.

The intention is to sell the houses to university staff or local workers whose intention is to stay in the area and help contribute to the community. But the college realizes that it will have difficulty in making any stipulations stick. The vexed question of the house rentiers is now being studied by its solicitors.

It is now ready to go out to tender. The Percy Thomas Partnership has designed the houses and work on the first hatch, about 25, should begin this autumn. It will be ready for occupation in spring 1979.

The land was either bought or bequeathed to the University in the 1930s.

Ceredigion district council has given outline planning approval for the whole site and detailed planning approval for the first phase.

Greater access to welfare benefits demanded by NUS

Students should have the same rights as other citizens when they claim welfare benefits, particularly rent rebates and allowances, says the National Union of Students in its annual report for 1977.

In a submission delivered yesterday to the Department of the Environment and to the Government's Advisory Committee on Rent Allowances and Rebates, the NUS says that students have suffered hardship because welfare benefits are administered by government departments which see all questions of student support as coming under the DES.

The submission says: "NUS finds this allocation of responsibility for student support particularly worrying trend when escalating inflation has rapidly eroded the real value of the grant from its 1962 level and the latest DES survey into discretionary awards shows that most new full-value discretionary awards were made this academic year."

"We would argue that there is no comprehensive system of student support, nor is this likely to be achieved in the near future. Students should be entitled to the same welfare benefits as the rest of the population and, where these benefits are measured, entitlement should be based on actual income, not on imaginary level of student grant."

In a separate submission this week the NUS has complained to the Department of Health and Social Security that amended social security regulations drawn up by the Government will prevent many students from claiming unemployment benefit during the short vacations.

Under the new regulations mature students and those who have worked for several years before taking courses will be able to claim benefit. But those straight from school will be excluded, even if they have satisfied the normal contributions conditions by virtue of credits received in the sixth form and by working in the vacations before joining colleges.

Brunel council votes for college merger

The Council of Brunel University has voted to support a merger with Shoreditch College, Egham. The university has decided to accept the University Grants Committee's invitation to prepare a balanced plan for the development of design and technology courses at Shoreditch.

A working party set up by the university will look at ways in which the college site, which is 12 miles from Brunel, can be best used. It will also consider the implications for staff, courses and finances of the merger.

Established Open University now 'a target for criticism'

by Maggie Richards

The Open University, now a recognised part of the educational establishment, has become fair game for criticism, says Sir Walter Perry, the university's vice-chancellor, in his annual report for 1977.

In the report, just published, he says: "Even those who enthusiastically supported us because they shared in the idealism of our creators, and who, so far, have limited their criticisms to avoid damaging our viability, now see us as strong enough to stand up to the full blast of their more devastating comments."

Last year—in marked contrast to 1976—there had been a plethora of public interest in Open University activities. Some of it was very critical, says Sir Walter. "I am quite sure that although this is uncomfortable, it is also entirely healthy in forcing us to ask questions about our fundamental aims and purposes."

Dealing with allegations of political bias in one or two Oll courses last year, he says: "The OU is not alone in having been subject to allegations of this kind in 1977; however, it raises issues of profound importance to us as a university. The responsibility for issuing course materials, which are open to public scrutiny, lies with the university as a whole rather than on individuals as at other universities."

In this way, the very nature of the university's operation involves a particularly heavy responsibility on us to ensure that our courses are of the highest possible standard. The fact that a particular unit, or series of units, is written from a specific political standpoint is not in itself reprehensible; but the university needs to be sure that academic standards are not prejudiced by the omission of particular theories and viewpoints."

But in examining the long-term effect of the Open University on society, Sir Walter says the claims of political bias are of relatively low significance.

The important thing is that adults are being encouraged to think for themselves. If they do they will



Sir Walter Perry

of continuing education provision is, in my view, central to the role of a young institution which has not fully developed its basic inner graduate provision," he says.

The report states that the number of people making initial applications for OU places increased in 1977, although the overall number of applications was lower than in 1976—a factor attributed to the smaller number of previously unsuccessful applicants who re-applied for entry.

The Open University Report of the Vice-Chancellor to the Council, 1977 published by the Open University, Wotton Hall, Milton Keynes MK7 6AA.

Electrical engineers go it alone on test of entry standards

by Robin McKie

Science Correspondent

The electrical engineers have broken away from the other engineering institutions and are to introduce an accreditation system to test entry standards of university courses.

The Institute of Electrical Engineers and they follow a report on education and training by a working party, chaired by Mr J. Merriman, chairman of the National Computer Centre and past president of the Institution.

At present, all engineering institutions require only an ordinary degree for entry although it is understood that their central bodies, the Council of Engineering Institutions, is shortly to urge that a "good honours degree" be made the general minimum standard.

This will be revealed when the council publishes its evidence to the Planistat committee of inquiry into the manufacturing industry next month.

But a spokesman for the electrical engineers said they considered that they were leading the field in the debate over standards. And they are to base their accreditation system on the American system.

The Institute of Electrical Engineers has agreed by the institution, the EECI, to set up a working party to study the system in the Americas. He said this system had kept university departments up to scratch and helped United States industry keep ahead of most other countries.

The Merriman report states that the growth of modular and interdisciplinary courses has made it difficult to determine, without detailed appraisal, whether their degree in science and engineering could be acceptable. "An accreditation mechanism, where the institution reviews courses to identify those which satisfy its educational requirements, is essential," it adds.

At a recent open meeting, organized by the institution, the EECI president, Mr David Rogers, urged Britain to adopt a similar system to the Americans. He said this system had kept university departments up to scratch and helped United States industry keep ahead of most other countries.

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NATFHE CONFERENCE

Industrial action threat
in support of lower paid

by Judith Jindl
Members of the National Association of Teachers in Further and Higher Education defied their executive on the weekend to back an immediate pay claim for those on the lowest salary grade with a threat of industrial action.

The conference, at Bournemouth, took the decision despite warnings that it could threaten the unity of the 70,000 strong union. Most of the 9,000 at the lowest grade are in further education.

The executive is anxious that the Association of Polytechnic Teachers, whose members are all in polytechnics, should not be able to exploit divisions in NATFHE's ranks.

The vote was a victory for the union's left wing which was pushed through a motion calling on the executive to prepare the membership for industrial action if the claim is not accepted next year.

The demand that the two lowest salary grades should be amalgamated is supported by the executive but the conference's decision means that it will have to press ahead at once with the pay claim for the lowest paid instead of waiting until next April when the union's complete salary claim will be put forward.

Mr Stan Broadbridge, NATFHE's general secretary, said an interim claim would mean the union would be forced to arbitration and would have to convince three people who knew very little about the further education system. The union had to put forward a claim that all its different types of members could unite behind. It had to consider how such a claim would be received by those who were not on the lowest grade.

Mr Geoffrey Carter, a delegate from Oxford, launched a protest against the existence of a second-class group of lecturers. He spoke of the schoolteachers' success in industrial action after their claim was sent for arbitration.

A left-wing call for the negotiation of a flat-rate rather than percentage increase in next year's salary claim was defeated.

A speaker from the northern region said the latest pay rise gave a principal an increase of between £1,300 and £1,400, a senior lecturer one of £850 and an ordinary member one of £530.

Mr Tom Fisher, for the executive, said the union had a potential membership of 20,000 in polytechnics but its actual membership was only between 12,000 and 13,000. The flat rate would not help the unionization of higher education.

Mr John Howler, a member of the executive of both the National Union of Teachers and NATFHE, announced during the rare debates that four Labour MPs had agreed to support a joint campaign by the two unions to change the provisions in the Representation of the People Act 1949 which excluded organizations like the National Front from electoral premises during election periods.

The MPs were Mr Bryan Davies, Mr Martin Plummer, Mr Gwyneth Roberts and Mr Cuthbert Lewis. The NUT and asked legal experts to draft the necessary changes in the legislation, he said.

In a debate on college democracy delegates voted for a resolution calling for governing bodies to include an independent of a number of members elected by staff from the full-time teaching staff.

In a debate on the Business and Technical Education Councils delegates voted to instruct the executive to intensify efforts to ensure that the TEC and BEC courses should have adequate recognition from teaching in view of the "anomalous workload".

The conference pledged to give its support to the initiatives of any branch or region seeking to delay the implementation of further levels in such courses until remission was available.

A plethora of resolutions on racialism condemned the association to campaign for changes in legislation relating to race issues. Delegates wanted the Race Relations Act 1976 strengthened to prevent the distribution in colleges of racist literature. They called for amendments in the legislation so that racist organizations could be banned from educational premises at all times. The Vagrancy Act 1824 ought also to be changed, they said, to prevent black youths from

being harassed under the arrest on suspicion provisions.

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Model E gets
Mr Oakes's
approval again

A clear reaffirmation of his support for the model of education for adult and working students was given by Mr Oakes at the 1978 conference of the Society of Education and Science.

Referring to the DES's recent decision to fund a higher education in the 1990s Mr Oakes said that despite the difficulties of demography and economics the options for the future were limited. He said that the DES's decision to fund a higher education was a step forward.

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Britain's lack of women engineers
a waste, Finniston committee told

by Robin McKie
Science Correspondent
Britain has the world's lowest percentage of professional women engineers, the Finniston committee of inquiry into the manufacturing industry has been told.

In its submission to the committee, the Women's Engineering Society reveals that the United Kingdom only one engineer in 500 is a woman, while the figures for France are one in 33; for Scandinavia one in 10; and for Eastern Europe and Russia one in three.

"It is undoubtedly the greatest waste of technical potential in this country," the society's report says. "It stresses that this position is now getting critical. Increased automation and improved technology has diminished requirements for physical strength and increased the need for dexterity and flexibility."

"Many industries where women were hitherto not considered for employment could well benefit from the talents and aptitudes available in appropriately trained women engineers," the society adds.

According to the CBI's submission to the Finniston committee, published this week, a clear majority of members of the Confederation of British Industry are opposed to the idea of statutory registration of engineers.

The CBI gives two main reasons for opposing any registration system setting standards of qualification and rules of professional conduct for engineers. A Government agency with no legal responsibility

as yet under-exploited source of good engineering material."

The society urges that more should be done to inform young people about engineering and to recruit more high calibre young people, particularly girls. A study should be made of the present methods of selection, induction and training, and their success rate assessed for both boys and girls.

The society is also calling for the setting up of a complete career structure, from technician in professional engineer and engineering manager. This would be for both sexes.

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Scots review pay
rise ruling
for OU graduates

The Scottish Teachers' Salaries Committee is to review its exclusion of Open University honours graduates from a pay entitlement made to honours graduates from all other British universities teaching the upper forms of Scottish secondary schools.

Last week Sir Walter Perry, vice-chancellor of the Open University, and Mr George Arkison, its Scottish director, met representatives of the committee to discuss the issue.

Following the meeting the groups issued a joint statement which said the talks had been held to explore areas where a difference of attitudes existed. A report of the discussions will now be relayed back for consideration by the entire salaries committee and the university authorities.

Until the early 1970s only honours graduates from Scottish universities were automatically eligible for the pay increment, which is now worth between £200 and £300, in 1972 responsibility for determining the salaries of Scottish teachers passed from the Secretary of State for Scotland to the committee.

Last August it announced that teachers holding honours degrees from all British universities and those of the Council for National Academic Awards would be entitled to the pay increment. The Open University was excluded from the arrangement apart from prior agreement reached in 1975 relating to mathematics and history honours graduates. Since then OU officials have been pressing for a meeting.

It is hoped the committee will have come to some conclusion on the issue by the end of the summer.

The committee of the Senate will not vote on the proposal that those should have no vote on the limited tenure arrangements which the university's faculty of education and the University Teachers' Association has been opposing.

The AUT said that the Regent House should be allowed its constitutional rights and should be balanced on the question.

It is pressing for a change in the tenure system on the ground that assistant lecturers' terms of employment are worse at Cambridge than at other universities. At Cambridge their tenure is limited to five years. However, its views were ignored down by the university's General Board last year. The board said the present system should remain with one amendment.

A total of 24 students are now undertaking the master of science degree course in environmental technology which has been launched by the centre with funds from the research councils. The degree will provide courses in engineering, ecology, resource economics and environmental law.

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by
Alexander Pushkin
Translated into English verse
by
Charles Johnston

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The perils of modern electronics are to be discussed at a one-day conference in London on Thursday.

"Automation—Friend or Foe?" has been organized by the British Association for the Advancement of Science and will be held at the scientific societies' lecture theatre in Savile Row. Speakers will include Professor Sir Sam Edwards, of the Raytheon Laboratory, Mr Derek Roberts, managing director of Plessey Microsystems, Professor Albert Clerns, of the social sciences department, Loughborough University; and Mr Geoffrey Robinson, MP; and Mr Simon Petch, deputy general secretary of the Engineers and Managers Association.

The secretary of the BA, Sir Iwan

Madcock, said that in the past technology had frequently plunged ahead with little regard for society.

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After the
'hump'—just
a dip?

by Ngaiio Creque
Birmingham University welcomes the growth of four-year degree courses and voluntary deferred entry for students in its response to the Government discussion paper: Higher Education into the 1990s.

A Senate working party decisively favoured Models D and E of the paper, which retain the Kolb's principle of higher education for those with the ability to pursue it while providing for a greater diversity in the type and length of courses. Further, the university agrees that more children of manual workers should be encouraged to take up higher education, and that it should strengthen its commitment to mature students.

The paper is primarily an exercise in ways to deal with the forecast "hump" in higher education output between now and the early 1990s. But Birmingham shows a professional scepticism for Government figures on the likely participation of 18/21-year-olds in higher education.

The working party states, "the success rate of reasonable forecasts in this field is dismally low" and accuses the Government of "unwarranted confidence".

Professor John Jinks, Professor of Genetics at Birmingham University, who chaired the Senate working party, said: "We think it is not so much a question of how we will get over the hump, but are we only seeing a temporary dip? And what measures should we be providing for that? We might be looking at the wrong things."

The Senate thinks that some of the suggestions made by the Government should be pursued. It says that the three-year single honours degree course, taken on a full-time basis by school leavers entering university at the age of 18, is not necessarily the best kind of course to offer.

There should be greater flexibility, particularly with four-year courses in the applied sciences, including some vocational training. It uses medical students as its model. "We are also the fear that any N and P level schemes in the schools would mean that first year university courses would have to be more generalized."

Lennox, page 27

Vote on assistants' tenure next term

Agonities at Cambridge University will not end next term as the tenure system for assistant lecturers despite the opposition of the university's General Board.

The Council of the Senate has returned the board's proposal that those should have no vote on the limited tenure arrangements which the university's faculty of education and the University Teachers' Association has been opposing.

The AUT said that the Regent House should be allowed its constitutional rights and should be balanced on the question.

It is pressing for a change in the tenure system on the ground that assistant lecturers' terms of employment are worse at Cambridge than at other universities. At Cambridge their tenure is limited to five years. However, its views were ignored down by the university's General Board last year. The board said the present system should remain with one amendment.

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No soft touch
among GCE
exam boards

by Maggie Richards
There is "reassuring evidence" of overall comparability between GCE examining boards according to the first published review of the boards' work this week.

Bringing disappointment to anyone hoping to identify which board is the "softest touch" for high grades, the review reports: "The pattern is variegated, with consistent hints of leniency here, severity there (sometimes self-cancelling in effect), and reassuring evidence, with some qualifications, of overall comparability."

Explaining the decision to go public for the first time since the 1955 GCE examinations in 1955, the review says there is increased general interest in the problems of comparability. The review is also intended to allay possible suspicions that the boards have been oblivious to the need to maintain standards.

Of the various methods used to establish comparability—a study of examination results, monitor testing, and cross-modulation—the review strongly favours the latter as the most reliable.

Although the scrutineers are usually local examiners, the review says that recent studies confirm the advisability of also employing outsiders, such as school teachers experienced in preparing pupils for GCE examinations as teachers in higher education with special experience of tutoring students who have recently taken GCE.

Cross-modulation also comes closest to a simulation of the normal task of an examining board, the review says; although it concedes that the highly subjective nature of the judgments may make the findings less reliable.

But the methodology has been sharpened over the years, and there is scope for further development. Pointing to factors which make any study of comparability difficult, the review says there is no such thing as a typical GCE board. Comparability in GCE: A Review of the Boards' Studies, 1964-1977 by E. S. Balfour, E. M. Forrest and D. J. Shaw, published by the Joint Moderation Board, Manchester, on behalf of the GCE Examining Boards, and available from any of the boards, price 40p.

Mr Shore opens environment centre

A new centre for environmental technology was opened at Imperial College, London, this week by Mr Peter Shore, the Secretary of State for the Environment.

Set up with the object of bringing together scientific and engineering skills, the centre will undertake contract research for Government and industry on problems in public health and water resources, transport, mining and the environment, vibration and noise, and pollution monitoring and control. A group funded by the Department of Environment will also carry out studies on environmental policy and management.

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Shoot-out in Stirling film degree

Undergraduates at Stirling University will for the first time this year be able to study western and European films as part of their degree.

The new film studies course comprises two parts lasting a semester each and will concentrate on a more specialized study of "Genre".

Dr John Izard, at present lecturer in English at the University of Colorado, where he has been teaching film studies for several years, will be responsible for the course, which begins in September.

He will also be in charge of developing a film and communication studies department which is to include a study of television. The task will take at least three years.

Speaking of his plans for the future at Stirling, Dr Izard said: "The emphasis in the first two courses and after will be on films made since the Second World War. The functioning of the Hollywood industry will be given particular attention. Students will learn how to 'read the screen', how to evaluate films, and, I hope, how to enjoy more fully both popular and esoteric films."

He added that with the advantage of access to the Gifford Archive, located in the university's library, the film studies department would be well placed to establish a course in the British documentary movement. This would probably attract postgraduates who wanted to do research in the documentary tradition. Several enquiries have been received.

Administration options at Robert Gordon's

by Maggie Richards

Demand for graduates with a sound knowledge of the needs of public authorities and for social workers with a grounding in administration has led to the creation of a new four-year BA degree course at Robert Gordon's Institute of Technology in Aberdeen.

All students taking the new degree will follow the same course of study for two years. Two separate study options will then be offered: one is a BA in Public Administration, while students interested in social work will take this degree with a qualification in social work.

To combine theory and practice elements of training, a total of 38 weeks placement has been built into the course, and training placements for students have already been arranged with a large number of agencies, stretching as far south as the Isle of Wight.

The normal entry age for students studying public administration is 17, but students following the social work option need to be at least 22 on completion of the course, in line with the requirements of the Social Work Act. The new course is not intended to replace the existing two-year course run for the past 10 years at the Institute for mature students and leading to the Certificate of Qualification in Social Work. Heavy demand for this course means that it will continue to operate in parallel with the new degree course.

Six combine on Middle Ages

by Patricia Santinelli

Six departments at Lancaster University have developed an undergraduate scheme in medieval studies combining the history and culture of the Middle Ages.

The course beginning next October aims to give students a broad understanding of the Middle Ages from the perspective of its politics, history, society, culture and languages.

The departments of history, Arabic and Islamic studies, classics and medieval, English language and medieval literature, French studies and Italian studies will all contribute to the scheme.

Speaking about the new degree, Dr David King, director of studies, said that at many universities, different aspects of medieval studies were taught by departments as com-

ponents of various traditional degree courses.

"The Lancaster degree system, however, has enabled us to offer an interdisciplinary medieval studies scheme to undergraduates and to vary it to suit different interests."

Mrs Meg Twyler, chairman of the Medieval Studies Committee, said that this interdisciplinary approach was particularly appropriate because in the Middle Ages, politics, society and culture were more "interrelated" and their world picture more integrated than in any period since.

"Usually in universities, any attempt to make serious links between the traditional disciplines has had to be postponed to postgraduate level," she pointed out.

The new degree is in two parts. In their first year students majoring

in medieval studies take history, either two subjects they will study throughout the second and third years, or one of those subjects in a course in medieval languages.

Part Two, students are required to select three units from the list of other options.

In choosing these, students select courses from at least two departments other than the history department, and their studies about their combined courses, some of which have been specially designed for students taking a foreign language.

Students who choose to take other subjects in the humanities also take one selected pair of medieval studies from a number of options at a minimum of their second and third years alongside their major course.

Strathclyde moves to develop part-time learning

by Judith Judd

Strathclyde University is to begin a certificate in continuing education in October in line with the universities' increasing commitment to part-time education.

The experimental course will be the first offered in English studies and history but should be extended to other subjects later depending on the demand from students.

The certificate will receive their certificates after studying for no more than four years. The initial course is a success, the English and history departments may consider the possibility of developing it to cater for more advanced degree courses. Students would be able to take the certificate.

This decision to start the certificate follows the reorganisation of the university's traditional extension studies programme two years ago. The university says that "the extension of the university's adult education commitment was in line with contemporary thinking that United Kingdom universities generally should improve their facilities for those persons interested in higher educational opportunities who were nevertheless unable to engage in full-time study."

Professor I. E. Clarke, chairman of the continuing education committee and professor in the department of English studies, said: "We are reasonably sure that the courses planned will greatly benefit people in the West of Scotland where there has been a long involvement in adult education. Students enrolling in the English or history courses will attend selected day classes alongside full-time undergraduates."

Mr Peter Nelson, director of continuing education, said: "Experience at national and local level suggests that free developments are desirable in the field of continuing education."

"The University has been sympathetic to the views of the Alexander report and of organisations such as the RUC that universities should make efforts to extend their teaching resources for the benefit of those who can only find time for part-time study."

Planning MA 'first' goes to Trent

Trent Polytechnic at Nottingham is to run the first two-year masters degree course in planning to be approved by the Council for National Academic Awards.

The MA in Town and Country Planning is in effect an upgraded and extended version of the Royal Town Planning Institute's recognised two-year graduate programme instituted in 1964.

Approved by CNAA will allow an increased emphasis on providing an academic education as well as advanced specialist training for professional career in town and country planning.

It will also offer students improved opportunities to develop their own planning interests and expertise in practical and research areas.



Example of "Access" style.

£5,000 for literacy magazine

A new monthly magazine in cater for the needs of adult literacy students is being published by the National Extension College in Cambridge.

Financed by a £5,000 grant from the Adult Literacy Resource Agency, the magazine Access has been designed for use in local literacy schemes by students ready to move from one-to-one tuition to group or independent learning.

Ten issues of Access are scheduled to appear at monthly intervals, to help students to practise their literacy skills in adult environments and assist them in using their literacy skills in everyday life. The magazine, which is written by Mr Tom MacFarlane, of the Alford Moss Centre, Manchester, is also intended for use by tutors as a basis for discussion and progress.

The first issue contains sections on motivation, a step by step guide to filling in an income tax return and an explanation of the role of the local council.

Future issues will concentrate on other topics, including employment, health and welfare, trade unionism, further education and training and housing. There will also be regular features on letter-writing and keeping a diary.

Copies of the first issue of Access are available from the National Extension College, 11 Hills Road, Cambridge. Orders of five to five copies cost 25p each plus 5p postage. Orders of five or more cost 20p each, plus 5p postage on each.

TO: RESEARCH RESOURCES LTD.
P.O. Box 160, Potters Bar, Herts.
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North American News

Campus launches drive to improve maths teaching

from Clive Cookson

The University of California in Berkeley is planning to follow up its highly successful Bay Area Writing Project (BAWP)—which has given rise to the National Writing Project—with a similar drive to improve school mathematics teaching.

BAWP started five years ago as a partnership between Berkeley and the high schools in the San Francisco Bay area, to improve pupils' writing skills through an intensive in-service training programme for teachers. Its success led to funding from the California Department of Education and from the federal government's National Endowment for the Humanities to spread the project throughout the state and then, as the National Writing Project, all over the United States. This year 39 universities and colleges from San Diego to New Jersey are participating, and next year there will be 50 writing centres.

Now, back at Berkeley, a mathematics committee is planning to use the BAWP model to improve mathematics teaching. The committee is now at the point of talking about a "maths project" says BAWP director James Gray.

It is becoming clear that the maths project cannot be a direct copy of the writing project. "We are presently trying to find out what the problems are, and it turns out that the problems in mathematics may be very different from those in English," says Mr Gray.

At the heart of the writing project is the fact that most English teachers in American secondary schools were trained in literature rather than composition. The BAWP concentrated on improving high school teachers' skills in writing and getting them to pass them on to their pupils—and their fellow teachers.

In contrast, says Dr Park, high school maths seem to be relatively well covered by teachers who are extremely knowledgeable about the subject and how to teach it. The problem is that so many pupils, even those with an innate aptitude for mathematics, have been discouraged by the subject before they reach secondary education. The maths project is therefore likely to have to work at the primary level.

The mathematics committee is looking for elementary schools in the United States, as in Britain, where it is largely female teachers, many of whose mothers are either no good at maths or who themselves put off it as "boring" because mathematics was regarded as boys' subjects.

These teachers are often frightened of maths and they pass their fears on to their pupils, giving them the well-known "maths anxiety" syndrome. If Berkeley can find a way to break this

anxiety cycle, they will have achieved one of the most important educational breakthroughs of the century.

Meanwhile, the writing project, which has been successful in strengthening school districts are queuing up to send teachers to BAWP—at a cost of \$1,720 a year—and universities are clamouring to become writing centres. Each receives a \$15,000 grant to set up a writing centre, and to meet all its costs after the first year.

Twelve hundred Bay area teachers have now been helped by the original Berkeley centre, and they in turn have taught over 100,000 children. Over the United States, a million pupils are thought to have benefited already.

"We are going through to those teachers who have never been given a chance to go to conferences, teachers who have been untouched by any kind of staff development programme," says Mr Gray.

The heart of BAWP is an intensive five-week writing clinic on the Berkeley campus for high school English teachers. With university staff they study writing problems and possible remedies, investigate teaching methods, and spend a lot of time writing themselves.

After the course, the teachers become "writing consultants". They use the standard composition in their own schools, and conduct writing workshops in other school districts.

In addition, BAWP provides year-round in-service training facilities for Bay area schools. Writing centres elsewhere are modelled on Berkeley, although they are free to adapt the programme to local needs. Dr Gray and his staff provide some training and Bay area "writing consultants" travel to other centres to help them get going.

Evidence of the programme's effectiveness is now beginning to come up. Berkeley itself is now benefiting: the number of freshmen required to take remedial English has dropped from 50 to about 10 per cent.

The American Federation has put the BAWP on the agenda for formal evaluation of BAWP, comparing writing standards in schools that have and have not participated, and examining the impact on teachers and students. Preliminary results should be known next summer.

A special statement of the greatest success of the project has been the strength of the cooperative support it has generated from universities, schools and local, state and federal governments for the huge task of getting American schools to improve their mathematics teaching.

Professor Park believes that the writing project and the future mathematics project can also play an important role in the University of California's affirmative action programme to recruit more black and ethnic students.

Three ways of fighting causes of cancer

Three ways of detecting cancer-causing chemicals have been developed by three independent research groups at the University of California in San Francisco.

They are among the first tests to measure the effects of potential carcinogens on the cells of mammals and humans.

The usual tests for carcinogens, including the famous Ames test introduced by Professor Bruce Ames at UC-Berkeley, work by detecting mutations they cause to bacteria.

Although the experimental cloning of genes has shown that some genes affect the Ames test, it has been difficult to find a way to detect mutations in human cells.

The Ames test is excellent, some scientists have wondered how applicable bacterial tests are to human disease.

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Hence the need for a cross-check using mammalian cells.

Recently, however, the new tests developed at UC-San Francisco by research groups led by Sheldon Wolff, Philip Lotano and Robert Palmer are giving results that generally agree with the Ames test—for one important exception see below.

The first known of the three is Professor Wolff's test, which measures sister chromatid exchanges. All chromosomes (the X-shaped packages of DNA in animal cells) consist of two linked halves, the sister chromatids.

The staining technique is used to stain one chromatid in each chromosome dark and leave the other pale. The margins cause breaks in the sister chromatids to be seen as dark spots.

Recently published a paper by Professor Wolff reporting that his test found saccharin to alter the DNA of hamster and human cells.

In this case, researchers using the Ames test did not detect any mutations caused by saccharin in bacteria, and Wolff's evidence will

Summer school for security top brass

Thirty or forty security chiefs will go back to school in August for an intense, two-week course conducted by Harvard's John F. Kennedy School of Government.

They will include generals, admirals, and top civilian policy makers from the Central Intelligence Agency, National Security Council, the State Department and other security-related government agencies.

"The claim we make is that this programme has no counterpart either within or outside government," says its plaudits director, Douglas Johnston. "We are not interested in duplicating what's already provided at the service colleges or in other advanced training programmes, but rather in supplementing it at a higher level."

The military, which has many training programmes for junior and middle ranking officers, recognizes the need for continuing education at this level and is greeting the new programme with enthusiasm, according to Mr Johnston, who was a senior civil servant in the Navy Department until last year.

Civilians in important government jobs also need training, he says, because many of them come from specialist backgrounds and have had little or no previous experience in government. This is more true of the United States with its huge turnover of politically appointed bureaucrats—thousands of new executives come to Washington when the administration changes—than it is of the relatively stagnant and isolated British Civil Service.

Harvard's School of Government is known as the place where America's top people go for continuing education. The new programme will supplement the established "programme for senior managers in government" and the "programme in environmental policy and management".

The planned curriculum for the security chiefs course does not fit standard national security categories. Instead of concentrating on specific strategic and tactical issues, participants will discuss Washington decision-making in more general terms, trying to see it from other perspectives.

"We want the participants to think and speak openly about the roles they and their colleagues play in making policy and in the interplay of government programmes," says faculty chairman Professor Ernest May.

The case method will be used to "give participants a vicarious experience of what it's like to be a member of Congress, a cabinet member, a senior civil servant, a 6.30 deadline, or the Secretary of Labour".

The programme will deal only with unclassified material. But no foreigners will be invited to take part, at least in the first course, on the basis that it might inhibit discussion.

Report urges shake-up of northern colleges

from our correspondent

Ontario's "northern dilemma" has long vexed the provincial government. It is whether to pay for educational equality by maintaining an expensive system of colleges and universities in the sparsely-populated north of the province or to allocate its educational resources "efficiently" and accept inferior post-secondary education in the north.

It is a dilemma faced by many governments administering territories with widely differing population densities. And so far Ontario has come nowhere near resolving it, despite many years of argument.

Southern universities tend to feel that in the light of the "new reality" of declining enrolments and declining financial resources, the present system of northern colleges and universities is an expensive luxury.

The Ontario government, however, has already issued a detailed critique of the population in the north but he urges them to work together to produce a comprehensive programme of extension courses for northeastern Ontario.

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plain response. He said the two institutions had completely different aims and methods of operation and would both be damaged by amalgamation.

Mr Curtis also challenged Professor Cameron's assumption that northern Ontario needs a different system of higher education to the south.

Other mergers recommended in the Cameron Report are between Nipissing, University College and Canadore College in North Bay and between Algoma University College and Sault College in Sault Ste Marie.

He drops short of recommending an immediate merger of Laurentian University and Cambrian College in Sudbury (the largest centre of population in the north) but he urges them to work together to produce a comprehensive programme of extension courses for northeastern Ontario.

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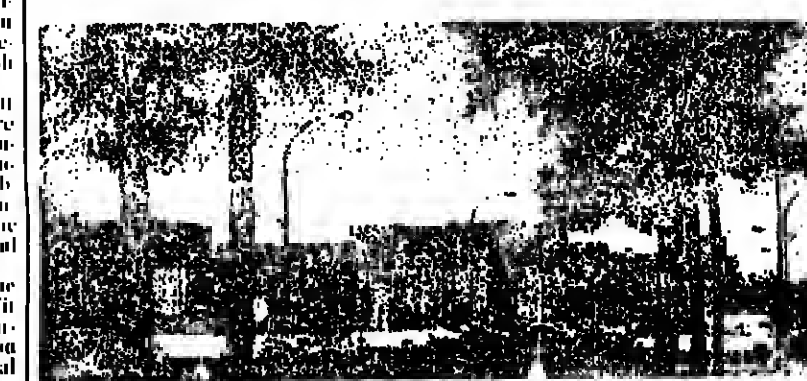
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Thunder Bay's Confederation College: merger recommended.

John O'Leary on the grim struggle by SACHED to provide independent higher education for blacks in South Africa

Teachers fight on to give Blacks their rights

The prospects for an independent education to provide higher education for blacks in South Africa have seldom looked gloomier. Yet leaders of SACHED, the South African Council for Higher Education, are refusing to concede defeat despite a series of setbacks.

Twenty years of work within the apartheid system do not appear to have played government suspicions that SACHED is a disruptive influence. In that time it has expanded its efforts on behalf of blacks from the provision of a small number of bursaries for students to take external degrees, to direct contact with some 2,000 students on a number of educational levels.

Now, however, just as it seemed on the verge of a breakthrough in effectiveness, SACHED is left to pick up the pieces of its most important programmes. Two have been abruptly ended by official action and others have been hit by the loss of four members of staff in a month.

Two black members of staff were detained along with the rest of the executive of the Azanian People's Organisation, a new black party which had not even drafted a constitution before coming to grief. Then, more seriously for SACHED, banning orders were served on Mr David Adler, the trust's director, and Mr Clive Nettleton, its chief educational consultant.

Both were key men in the organization and the five-year bans, for which no reason has been given, prevent them from working in any field of education. They are restricted to Johannesburg, where they must report weekly to the police, may not enter a number of premises, including schools, and are forbidden to attend gatherings of more than two people. Neither may be allowed a passport.

The task of leading SACHED through the crisis has fallen to a Dutchman who was one of the council's founders and has been Mr Adler's co-director since 1971. Mr Derks was on a fundraising tour of Europe when the banning order was served, and was allowed to re-enter the country last week.

With almost one-third of the 2,678,000 economically active blacks in the 20-49 age group still totally uneducated, the need for extra assistance for the blacks is urgent and severe. To bring black educational spending up to the white level of R50 per pupil annually would mean increasing the education budget in 13 per cent of the gross national product—by far the highest in the world and clearly out of the question.

Indeed, the South African government has yet publicly to discard Dr Verwoerd's policy statement in introducing the Bantu Education Act, that there was no purpose in providing an education for blacks qualifying them for jobs outside their own community above a certain level. To do so was dishonest and disrupted the community life of the black as well as the European.

Since that statement in 1954 there have been advances in black education, but per capita spending remains minimal compared with that on the other races. Although the black school population almost doubled in the 10 years up to 1972 and spending rose from R17 to R50 per head, the per capita spending on whites rose by R200 in the same period.

The division is just as clear in the present number and qualifications of teachers. The sharp rise in the school population worsened the pupil/teacher ratio from 1:54 in

1960 to 1:56 in 1973. And, while all white teachers have qualifications at least equivalent to A-levels, more than 10,000 of the 68,000 black teachers have no formal qualifications. Less than 2 per cent of black teachers have university degrees, compared with 31 per cent of whites.

Since 1959 blacks have been prohibited from the white universities except by special permission, where particular subjects are not available in the three universities set aside for them.

Against this background SACHED sees its alternative approach to adult education as the only means of improving the educational life of the blacks. With a staff of 90 operating from centres in Cape Town, Durban and Johannesburg, the trust aims to reach students in their own community, usually through correspondence courses. However, the events of the past year have raised questions about how far the government will allow this approach to succeed. As the trust's annual report says: "Nineteen seventy seven was a pressure year, but 1978 was to be the year in which the most serious things were to happen. These dreams were rudely shattered in the latter part of the year."

First came the sudden and unexplained announcement that the Teacher Upgrading Programme in Bophuthatane was to be terminated on the instruction of the homeland's cabinet. The project, which was co-sponsored by the Bophuthatane Education Department, SACHED and the Anglo American Group Chairman's Fund, had run for three of its planned five years. The aim was to help 1,000 unqualified teachers to gain certificates of the Bantu Education Department and to develop a cheap and efficient in-service training scheme for years to come.

Its closure was said to be contrary to the wishes and expectations of the trust's parties and SACHED has now decided to have further programme in the homeland. The trust's most ambitious project and its first attempt to become a mass organisation has also been a victim of official policy in the last year. This came in the form of the highest-selling black newspaper, *Weekend World*.

By 1977 the supplement had grown to 24 pages a week varying from advice on practical matters to more conventional adult education. The paper had a circulation of 230,000 and with students encouraged to use the supplement for group study, readership was estimated at 1.3m.

However, the scheme, which had produced unprecedented response, was last October when *Weekend World* was banned by the Minister of Justice, Mr J. T. C. Esterhuysen.

Even now, after the loss of David Adler and Clive Nettleton, SACHED's trials may not be over. One of the main themes of the recent South African election was opposition to "outside interference" and 88 per cent of SACHED's £500,000 income for 1977 came from grants from abroad.

A Bill now before the South African Parliament could subject all such grants, whether from outside or inside the country, to government control.

Nothing daunted, Theo Derks has won the approval of donors for a number of new programmes, including the establishment of the education supplement and a basic education programme to allow slightly educated adults to improve their literacy and become numerate.



Cambridge luminaries: Lord Rutherford (left) and I. A. Richards in the early 1920s.

Lost innocence and the pursuit of early glittering prizes

Cambridge between the wars was a prism which refracted the political and moral turbulence of an age. It produced in two decades a spectrum of men and ideas which reshaped the intellectual contours of the world. At the close of the Great War it possessed an almost Arcadian innocence; in the 1930s it had become a rearing steed of the modernist movement. But all the while it retained its dourly industrial character, and, above all, its unique creativity.

In a book published last week the lives and thoughts of the teachers and students at Cambridge in those years are lovingly recorded by the author, T. E. B. Howarth, its senior tutor at Magdalene. Born in 1914, he was high master of St Paul's and a personal aide to Field Marshal Montgomery. In Cambridge between the wars his life was a celebration of the contradictions which defined that tumultuous Cambridge life while England herself was convulsed by the general strike and the depression.

Howarth deals with the 1920s and 1930s in separate parts, but his story is not a formal and chronological history. In each part there are chapters devoted to "men, women and manners"; "the advancement of learning"; and "politics". But despite its neat categories, the book achieves detailed analysis of the social and intellectual life of the university. In each part there are chapters devoted to "men, women and manners"; "the advancement of learning"; and "politics".

At the beginning of the period Cambridge had to exorcise the ghosts of the war. In 1918 Bertrand Russell was removed from his lectureship at Trinity for advocating pacifism. In 1920 Norman Angell, founder member of the Union of Democratic Control, and later a winner of the Nobel Peace Prize, was denied a hearing at the university "and only rescued from immersion in the river by police intervention".

In 1919 ex-officers interrupted a debate between the Cambridge Socialist Society and the Cambridge Independent Labour Party and forced three of the speakers to stand on a table and sing "God Save the King".

At the end of hostilities also meant that the university was able to grind slowly back to life. During the war the number of students had fallen to 235. By January, 1919, the number was 2,535, by May 3,444. Demobilization brought back a dazzling pantheon of dons who were to reach eminence in their disciplines. From the Treasury came Maynard Keynes and from interment came the physicist James Chadwick, who was later to discover the neutron.

The early 1920s were, however, a conservative period both politically and intellectually. Howarth quotes Basil Willey, then a young Cam-

bridge English lecturer: "Of the major corrosives of the century, of Marx and Freud, for example, hardly more than a sonnet had been yet trickled through into our foot's paradise. I shall never forget the amazement, the incredulity, with which I first heard from one of my own pupils (who was a communist, or about to become one) that a poem, an image, an emotion or an ideal could be bourgeois."

Howarth, himself, a noted poet and novelist, recalls the emergence of a new literary quarterly, containing what he loftily dismissed as several pages of "what is presumably intended for poetry by Mr T. S. Eliot".

Two avant-garde literary magazines, *The Venture* and the more iconoclastic *Experiment*, made their appearance in 1928. The Cambridge Bloomsbury nexus also helped to create a new canon of texts although the "enraptured philistinism" of the public and grammar schools was a handicap.

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Higher education finance into the 1990s

One of the cardinal principles of public sector decision-making results from the uncertainty of the future and an asymmetry between the rewards for being right and the penalties for being wrong. In any assessment of likely incomes, this in decision-making is at least as important to guard against being wrong as it is to take that course of action which would be best if future constraints on policy were known with certainty.

In the situation in the DES discussion document "Higher Education into the 1990s", when most "reasonable" projections involve an expansion of demand far higher than the period of best education growth and at worst decline, there can be little doubt that some form of "tunnelling through the hump" will be seen by the Government as the "least bad" policy and the one that is most likely to be followed.

If they assume that the actual growth of demand will follow the central or upper assumption and in the event actual demand falls below the central assumption, the subsequent necessary contraction will be far more painful than would be a sudden rapid expansion of capacity. If current decisions were mistakenly based on the low variant. In other words by "betting" on the low variant in the immediate future the Government stands to lose less than by backing the high variant. The pressure to adopt such a strategy is strengthened by the fact that for 10 years the preparation of 18-year-olds entering higher education has not increased.

The most rational policy from the government's point of view entails some risk of failing to meet student demand for a few years followed by an acceptance of the desirability of taking steps to help universities and polytechnics to deal with the problem. The pressure to adopt such a strategy is strengthened by the fact that for 10 years the preparation of 18-year-olds entering higher education has not increased.

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Student grant policy is one of the few policy instruments by which the Government can influence the demand for higher education. Similarly the most effective instrument at their disposal for promoting other desirable changes in higher education is control of income. In the last analysis the Government is in a position to impose almost any global settlement it wishes on universities and polytechnics. However, this is a blunt instrument and by itself changes in the broad aggregate of funds are likely to be insufficient to achieve desired ends.

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is little doubt that in the long run it will be politically possible by this means to channel more resources to overseas students in Britain than through general subsidy to universities. This applies whether the aid is seen strictly as an extension of British foreign policy or ideologically as a way of helping the third world.

The decision to sidestep this issue by raising the level of fees for all students was a clever political move and deserves acknowledgement as such. However, it has tended to divert the debate away from the general issue of the desirability of student fees as a significant source of income for higher education.

In 1975/76 80 per cent of university income for recurrent expenditure came from the University Grants Committee, 5 per cent came from student fees and associated support costs, 6 per cent came from research grants and contracts and 3 per cent came from miscellaneous sources such as gifts and endowments. In 1961/62 when recurrent grants from the UGC represented less than 70 per cent of income and fees 9 per cent, the Robbins committee expressed concern that the dominance of one source of finance ought to be a cause of some concern.

However, sympathetically the UGC performed its tasks and however hard it fought for university interests in the councils of government, there are dangers in almost total reliance on one source of income. Indeed, the constitution of the UGC itself is such that it offers the university virtually no protection against a government that wishes to bring one or all of them to heel. It is conventional practice alone which protects the autonomy of British universities. Even though the majority of fees and grants come ultimately from the public purse, Robbins thought it "a source of strength that public finance should come from more than one channel".

The committee went on to recommend specially that tuition fees should be revised so that in future they meet at least 20 per cent of current institutional expenditure.

The Robbins report did not explicitly use the argument that a substantial fee income would be likely

to make universities more responsive to the wishes of their constituents but Lionel Robbins, the economist, was without doubt aware that this was the implication of the report's claim that "up to a point it is better to subsidise students than institutions" (paragraph 632). This is an old tradition in the economics of education dating back at least to the 1770s, when Adam Smith was horrified that as a result of the guaranteed income of Oxford University "the greater part of the public professors have, for these many years, given up altogether even the pretence of teaching".

Of course, there is no doubt that an increase in the fee component of university income will make the financial administration of universities more difficult.

Research contracts for government departments and industry should include not only full overheads and the relevant contribution to academic salaries but also, as recommended in the Rothschild report a few years ago, a significant component to support the fundamental research upon which most applied research ultimately depends.

Of course, such a system would need to recognize that some disciplines are more capital intensive in research than others. Also, there would need to be substantial increases in the resources available for personal research in arts and sciences. The growing activity of the British Academy in this area is to be welcomed.

It is not possible to state a priori what would be the optimal distribution of university income. If the time which university staff claim to spend on research corresponds to the actual allocation of resources this would suggest that about 25 per cent of university general income might be derived from the research councils.

At least two political advantages could well be derived from such a change. In the first place if the proportion of university recurrent income which derived from block grant were reduced from 80 per cent to 50 per cent with the other 50 per cent being derived from research, it would be more difficult for the government to cut research funding.

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Gareth Williams, left, argues that university financing ought to be tied more to teaching and research than is now the case



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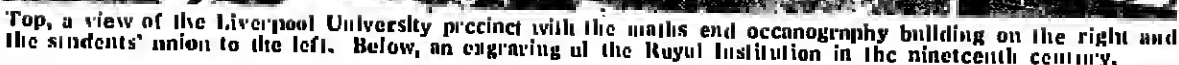
Teachers' qualifications

	African	Coloured	Indian	White	Total
Professionally qualified with:					
University degree	1,143	678	1,188	12,928	15,945
or equivalent	5,488	5,610	4,449	28,394	44,941
I.C. or equivalent	39,598	16,833	945		51,156
Standard 8	1,542				1,542
Other qualifications (eg. technical)					
No professional qualifications but:					
University degree	70	54	26	1,095	1,236
Passed some university subjects	581	478	89	1,479	2,635
Technical or other vocational	95	72	5		172
Not matriculated and no technical or other qualifications	10,169	1,282	133		11,584
	68,083	24,805	6,837	43,907	143,632

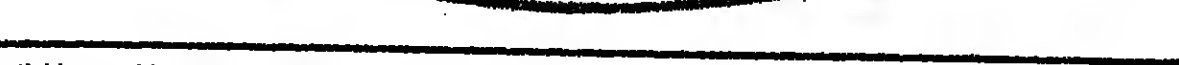
The case for Welsh studies in a European context

The School of Science, which was founded in 1861, was the beneficiary of grants from the Department of Science and Art in London, and might therefore be regarded as the result, locally, of competing movements in technical and higher education nationally. It did not succeed in shaking the university against Queen's College until about 1880, when it effected some radical changes had occurred in the atmosphere and aims of educational associations.

Neither Queen's College nor the School of Science ever had their own buildings. Queen's College used the lecture halls of the Law School, and the School of Science used almost every possible public building, including the Royal Institution and the (by theo-



Last week was the centenary of the meeting which resulted in the creation of University College, Liverpool, which eventually became a full university in 1903.



The Cambridge Lecture movement provided these bodies with an immediate goal and a practical structure for achieving it. During the years 1874-1880 more than 40

Active campaigners for the college included most of the leading figures of the voluntary educational life of Liverpool, and now a remarkable mingling of distinct parties could be seen. Charles Beard, minister of the principal Unitarian congregation, in Rushow Street, was a most powerful influence. Robert Gludstone represented the Anglican establishment, but of the laymen, the most prominent tended

A new building was also required. This was put up in 1892 by Alfred Waterhouse, a leading Gothicist, a building much disliked by subsequent generations, much admired today, but entirely suitable as an expression of the functions and ideals of a provincial university college.

The author is university archivist. In writing this prehistory he has been able to consult the first three chapters of a history of the University of Liverpool which is currently being written by emeritus professor Thomas Kelly, who held the chair of adult education at the university from 1967 to 1975. Professor Kelly's book will be published in time for the centenary in 1981 of the establishment of a university college.

The Europeanization of Britain, however, is helping to break down the nineteenth-century idea of the university from a quite different

Head-on collisions are usually avoided because the discussion of priorities within the university reflects a wider discussion of priorities within the community at large.

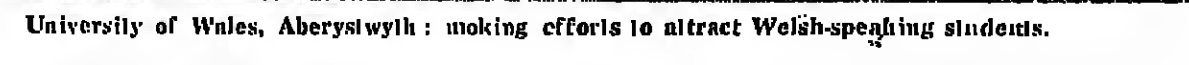
College/Institution
 Aberystwyth
 Bangor
 Cardiff
 Swansea
 Welsh National School of Medicine
 St Davids College, Lampeter
 Institute of Science and Technology
 All students from Wales

14-00000 From dinner for staff it tries to understand this as current

Both Aberystwyth and Bangor are now making strenuous efforts to attract more Welsh students. But while the level of expectation for courses in Welsh is rising, and perhaps also the numbers of Welsh-speaking sixth-formers academically prepared by their bilingual schooling to read degrees in Welsh, the total pool of Welsh speakers is small and still declining.

and the development of national politics in Wales. The Welsh economy has been the subject of some research and the Welsh Office is a source of a certain amount of research money.

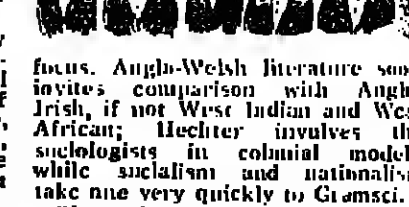
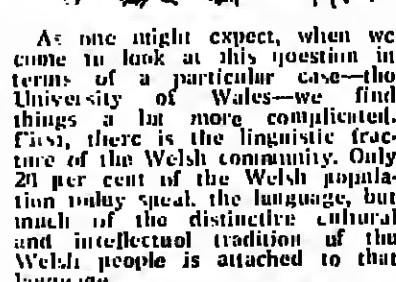
The social and industrial history of South Wales has been drawn into a continuing argument about



Source: Statistics of Education in Wales, 1972 (HMSO).

Ned Thomas

The author is lecturer in the department of English Language and Literature, University College of Wales, Aberystwyth.



The author is lecturer in the department of English Language and Literature, University College of Wales, Aberystwyth.

Noticeboard is compiled
by Patricia Santinella
and Mila Gold

Appointments vacant
Universities
Fellowships & Studentships
Polytechnics
Technical Colleges
Colleges and Institutes of
Technology
Colleges of Education
Colleges of Further Education

Colleges and Institutes of
Higher Education
Colleges and Departments
of Art
Research Posts
Administration
Overseas
Adult Education
Librarians
General Vacancies

Official Appointments
Appointments wanted
Other classifications
Awards
Announcements
Exhibitions
Personal
Courses
Holidays and Accommodation

TANT LECTURER
ENGLISH
from the 17th century or British
17th century.
A good M.A. with three to four
years' experience; base of salary: £6,000
plus a house allowance for
year contract.
Applicants should send their
CVs to: The Tunisian Embassy, 29
W. 17th Street, New York, NY 10011.
Closing date: 14th July
1978. Please quote ref:
78/TEN.

National Development
 will also be involved
 in the plans. \$1,750
 on the yard, including
 a new driveway. Mr.
 Peterson, president of
 the Kingsdale, B.C.

Director, particularly
Assistant Registrar (Educational)
University of Birmingham
Box 365, Birmingham
B15 2TT, for whom 3 copies of
copies - originals - 1 unit
one copy, should be sent
45 June, 1974.

...ing three referen-
sent at his July
Assistant Secretary
of Science and
P.O. Box 983
Springfield, Mass.
176 from whom
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obtained
1971-91.

4,800. Return passage and
aid family. Two year contract
for short-listed candidate
to be sent to: The
Director, London, S.W.7.

Agog's allowance for
in London in July.
and in Embassy, 29

particulars are available from the Personnel Officer, The Queen's University of Belfast, BT7 1NN, Northern Ireland. Closing date: 18th June 1978. (Please quote ref 78/THE/)

Closing date for applications is June 17, 1954.

Polytechnics continued

Ulster College Northern Ireland Polytechnic

Centre for Management Education

PRINCIPAL LECTURER— EDUCATIONAL MANAGEMENT

To play a leading role in the development of Educational Management courses including undergraduate and postgraduate courses. Candidates should have an appropriate postgraduate qualification and relevant experience.

TEMPORARY LECTURER II IN ACCOUNTING AND BUSINESS POLICY (One Year Appointment)

To work mainly in the fields of Accounting and Business Policy, relating these to the general management context. Candidates should hold appropriate academic qualifications, and preferably possess industrial and appropriate teaching experience.

Faculty of Social and Health Sciences

PRINCIPAL LECTURER— YOUTH AND COMMUNITY WORK

Applicants must be graduates, preferably in social science, with experience of teaching on youth and community work courses. A recognized qualification in youth and community work is also essential.

LECTURER II OR SENIOR LECTURER— RESIDENTIAL SOCIAL WORK

Applicants must hold a recognized social work qualification and have had appropriate experience in residential work. Experience in teaching on in-service courses or practice teaching would be an advantage.

Faculty of Technology

TEMPORARY LECTURER II— MECHANICAL ENGINEERING (One Year Appointment)

The person appointed must have a broad knowledge of Mechanical Engineering the primary duty of the post being the teaching of Mechanical Technology and Engineering Science. A Chartered Engineer would be preferred.

Salary Scales —
Principal Lecturer £7,047-£7,818/£8,844
Senior Lecturer £6,051-£7,055/£7,572
Lecturer II £4,101-£5,558
Temporary Lecturer II £4,101-£5,081

The Polytechnic is a direct grant institution with an independent Board of Governors. It opened in 1971 and now has a student population of some 7,100. It has extensive new purpose-built accommodation including 750 residential places on the 114-acre campus overlooking the sea at Jordanstown, a pleasant and quiet residential area. There is a scheme of assistance with removal. Further particulars and application forms, which must be returned by June 13, may be obtained by telephoning Whiteabbey (0231) 65131, ext. 2243, or by writing to: The Establishment Officer, The Northern Ireland Polytechnic, Shore Road, Newtownabbey, Co. Antrim BT37 0QB.

NEWCASTLE UPON TYNE POLYTECHNIC Division of Teaching Studies

PRINCIPAL LECTURER IN SPORT AND RECREATION STUDIES

Applications are invited for two full-time posts as Course Leader in the following areas: (a) SPORT AND RECREATION STUDIES. The successful candidate will be responsible for the development and delivery of the course. Candidates should have good academic qualifications and experience in an appropriate area of sport. An interest in the field of recreation, leisure and leisure studies would be a great advantage. The successful applicant will be required to take up post on 1st January, 1978.

(b) For further particulars, and an application form, returnable by Tuesday 13th June 1978, please send a stamped addressed postcard to: The Establishment Officer, Newcastle upon Tyne Polytechnic, Ellison Buildings, Ellison Place, Newcastle upon Tyne NE1 9BT.

Ulster College Northern Ireland Polytechnic

FACULTY OF BUSINESS ADMINISTRATION

Vacancies exist in the Schools of Accounting and Finance, Administration and Professional Studies, and Hotel, Catering and Institutional Management.

School of Accounting & Finance:

Because of developments in postgraduate Diploma in Accounting and expansion of existing courses, additional staff are required in Financial and Management Accounting as follows:

(1) **Principal Lecturer in Financial or Management Accounting**
Applicants should have an Honours Degree and/or be qualified with ACCA/ACA/ACMA/IFPA. A postgraduate qualification would be an advantage.

(2) **Lecturer I in Financial Accounting**
Applicants should have an Honours Degree and/or be a ACCA/ACA/ACMA/IFPA/ACIS with an enthusiasm for teaching. A postgraduate qualification would be an advantage.

(3) **Visiting Lecturer in Accounting (Senior Lecturer or Lecturer II Grade)**
Applicants should have an Honours Degree and/or be a ACCA/ACA/ACMA/IFPA/ACIS with an enthusiasm for teaching. A postgraduate qualification would be an advantage.

School of Administrative & Professional Studies:

(4) **Visiting Fellow in Public Administration (Principal Lecturer Grade) One Year Appointment**

A Visiting Fellow is required for one year to make a significant contribution to the development of research activities within a School responsible for the teaching of Public Administration on a variety of Degree courses. Applicants should possess a research degree in a discipline appropriate to the study of Public Administration and be engaged in teaching and/or research in that area.

School of Hotel, Catering & Institutional Management:

(5) **Visiting Fellow in Hotel and Catering Administration (Principal Lecturer Grade) One Year Appointment**

Applicants are invited from people holding a higher Degree or equivalent Honours Degree in an appropriate discipline. Relevant research, industrial or teaching experience would be an advantage. The person appointed will be expected to contribute to the teaching and development of a proposed Degree in Catering Administration.

(6) **Senior Lecturer or Lecturer II in Catering Administration**

Applicants should have a sound academic background and/or relevant professional qualifications. Postgraduate qualifications together with teaching and industrial experience would be an advantage.

(7) **Lecturer I or Lecturer II in Catering Studies**

A Lecturer is required to teach theory and practice of Food Production Systems to Higher National Diploma and Degree level students. Candidates should be academically qualified and preferably have relevant industrial and teaching experience.

Salary Scales:
Principal Lecturer £7,047-£7,818/£8,844
Senior Lecturer £6,051-£7,055/£7,572
Lecturer II £4,101-£5,558
Lecturer I £3,192-£5,334

The Polytechnic is a direct grant institution with an independent Board of Governors. It opened in 1971 and now has a student population of some 7,100. It has extensive new purpose-built accommodation including 750 residential places on the 114-acre campus overlooking the sea at Jordanstown, a pleasant and quiet residential area. There is a scheme of assistance with removal. Further particulars and application forms, which must be returned by June 13, may be obtained by telephoning Whiteabbey (0231) 65131, ext. 2243, or by writing to: The Establishment Officer, The Northern Ireland Polytechnic, Shore Road, Newtownabbey, Co. Antrim BT37 0QB.

THE POLYTECHNIC HUDDERSFIELD

Advisory Services Division SENIOR LECTURER—APPOINTMENTS AND CAREERS OFFICER Ref: ACA/228/128

Applications are invited from persons qualified to assume the responsibilities of this post which include career counselling, the provision of up to date information on opportunities and liaison with internal staff and external organisations.

In addition, to leading the Careers Section, the successful candidate will be involved in other aspects of the Division's work under the general direction of the Head.

Salary: £5,523-£6,447 (Bar)
Further details and application forms, which should be returned by 16 June 1978, from the Establishment Officer, The Polytechnic, Queensgate, Huddersfield, HD1 3DE, (Telephone 0484 22288 Ext 2226).

SHEFFIELD CITY POLYTECHNIC

FACULTY OF BUSINESS AND MANAGEMENT STUDIES

Applications are invited for the post of:

Senior Lecturer/Lecturer II in Production and Marketing Economics

Salary Scale: Senior Lecturer £7,047-£7,818/£8,844; Lecturer II £4,101-£5,558. The post is in the Department of Production and Marketing Economics. It involves the application of economic theory to the study of the production and marketing of goods and services. Research in this field is encouraged.

DEPARTMENT OF ECONOMICS AND BUSINESS STUDIES

Lecturer II/Senior Lecturer in Marketing

Salary Scale: Lecturer II £4,101-£5,558; Senior Lecturer £6,051-£7,055/£7,572. The post is in the Department of Marketing. It involves the application of marketing theory to the study of the marketing of goods and services. Research in this field is encouraged.

DEPARTMENT OF COMMUNICATION ARTS Photographic Fellow in Residence

Sheffield City Polytechnic, in conjunction with the Arts Council of Great Britain and the Yorkshire Arts Association, is offering a photographic fellow in residence for a period of 12 months. The post is in the Department of Communication Arts. The successful candidate will be expected to contribute to the teaching and development of a proposed Degree in Communication Arts.

DEPARTMENT OF MANAGEMENT STUDIES Research Assistant in Production & Design

Salary Scale: £3,192-£5,334. The post is in the Department of Management Studies. It involves the application of management theory to the study of the production and design of goods and services. Research in this field is encouraged.

The Polytechnic of North London

ASSISTANT DIRECTOR

Applications are invited for this post, following the appointment of Dr N. Singh to the Directorship of the Polytechnic.

Candidates should have high academic qualifications and a minimum of five years' experience in a senior administrative post in a university or polytechnic.

Salary: £13,527 (includes London Allowance). Further information may be obtained from The Clerk to the Governors, The Polytechnic of North London, Holloway, London N7 0DB.

Closing date for applications: 20 June 1978.

LECTURER II/SENIOR LECTURER IN ELECTRONICS

(4,101-£7,055 (Bar)-£7,572)
Candidates should preferably possess teaching and/or industrial experience. Research experience and a continuing interest in research work are essential requirements for the post. For further details and form of application please send a self-addressed postcard to the Chief Administrative Officer, Trent Polytechnic, Burton Street, Nottingham NG1 4BU. Closing date: 14 June 1978.

TRENT POLYTECHNIC NOTTINGHAM

LEICESTER THE POLYTECHNIC FACULTY OF ART AND DESIGN

DEPARTMENT OF ART AND DESIGN

Head, Mrs H. Bower, 14 A.

Applications are invited for the post of:

Lecturer II/Senior Lecturer in Production and Marketing Economics

Salary Scale: Senior Lecturer £7,047-£7,818/£8,844; Lecturer II £4,101-£5,558. The post is in the Department of Production and Marketing Economics. It involves the application of economic theory to the study of the production and marketing of goods and services. Research in this field is encouraged.

Polytechnics continued

Leeds POLYTECHNIC

School of Mechanical and Production Engineering

TEACHING APPOINTMENTS

Vacancies exist for post-time teaching staff mainly to undertake laboratory supervision. Remuneration will be in accordance with the rates for the relevant grade of the Engineering Council. The successful candidate will be expected to contribute to the development of the department's research and teaching activities.

Areas of research in the school include:—
Vibratory Conveying
Correlation and Spectral Analysis
Bugs Forming of Closed End Cylinders
Applications of Fluidisation
Turbotechnology

Interested persons are invited to contact Dr. R. E. Schofield, for informal discussions about the posts at School of Mechanical and Production Engineering, Leeds Polytechnic, Calverley Street, Leeds LS1 3HE. Tel: 0532 482743.

LEICESTER

THE POLYTECHNIC

RESEARCH ASSISTANT IN PRODUCTION AND DESIGN

Applications are invited for a Research Assistant in the Department of Production and Design. The successful candidate will be expected to contribute to the development of the department's research and teaching activities.

NEWCASTLE UPON TYNE

THE POLYTECHNIC

DEPARTMENT OF ADMINISTRATIVE AND MANAGEMENT STUDIES

SENIOR LECTURER II IN CONSTRUCTION MANAGEMENT

This is a new appointment in the Department of Administrative and Management Studies. The successful candidate will be expected to contribute to the development of the department's research and teaching activities.

DEPARTMENT OF ECONOMICS

LECTURER II—FINANCIAL

Applications are invited for a Lecturer II in the Department of Economics. The successful candidate will be expected to contribute to the development of the department's research and teaching activities.

SCHOOL OF MECHANICAL

ENGINEERING

LECTURER II IN PRODUCTION AND DESIGN

Applications are invited for a Lecturer II in the Department of Mechanical Engineering. The successful candidate will be expected to contribute to the development of the department's research and teaching activities.

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SCHOOL OF MECHANICAL

Yours faithfully,
PROFESSOR R. HOFFENBERG,
 Department of Medicine,
 University of Birmingham.

Letters for publication should arrive by Tuesday morning at the latest. They should be as short as possible and should be written on one side only.